

on ultrasound scans, thus raising the risk of missing multiple ovulation and multiple pregnancy. National guidelines in the United Kingdom for managing overweight women with PCOS advise weight loss, preferably to a body mass index of less than 30, before starting drugs for ovarian stimulation.<sup>10</sup>

The use of insulin lowering or sensitising agents has excited much interest in the management of PCOS. Metformin inhibits hepatic production of glucose, thereby decreasing insulin secretion, and enhances insulin sensitivity in cells. A systematic review concluded that metformin benefits women with PCOS by reducing serum insulin concentrations and thereby lowering androgen levels, facilitating ovulation, and improving reproductive outcomes.<sup>11</sup> Metformin seems to be less effective for women with anovulation and extreme obesity, although perhaps a higher dose is required than currently prescribed.<sup>12</sup>

Many obese women who wish to conceive are now prescribed metformin, often at body weights greater than would be permissible for treatment to induce ovulation. Those who ovulate and conceive while

remaining obese will have to face considerable additional risks during pregnancy. Is it ethical to treat these women with metformin unless they have already lost weight? At the very least the risks of the pregnancy to mother and child should be explained, understood, and actively managed before embarking on treatment. The importance of encouraging and achieving weight loss as first line treatment cannot be overestimated. We suggest that women with obesity and PCOS should defer even treatment with metformin until they reach a target body mass index of 35 or less.

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## Lost in transition? Between paediatric and adult services

*It's time to improve the transition of adolescents from paediatric to adult services*

Preventing adolescents becoming lost in the transfer between paediatric and adult health services is a major challenge for healthcare providers, paediatric and adult alike. Until recently British health services have largely ignored adolescents.<sup>1</sup> But as increasing numbers of young people are surviving into adulthood with illnesses they developed in childhood, the need for transitional care appropriate to their age and development is becoming more obvious and acute.<sup>2</sup> Adolescence is also a time when adult behaviours become established and therefore represents a window of opportunity to promote healthy behaviour and influence the public health burden of tomorrow's adults.<sup>1</sup>

Transitional care is a multidimensional, multidisciplinary process that addresses not only the medical needs of adolescents as they move from children's services to adult services but also their psychosocial, educational, and vocational needs. The need for such services has been shown by many surveys of young

people with various chronic conditions and their care givers,<sup>3-6</sup> and is supported by policy documents in the United Kingdom and United States.<sup>2-9</sup> To date, however, there has been a lack of robust evidence<sup>3</sup> to support development in transitional care. A recent multicentre trial of a transitional care programme in the UK has begun to address this deficit, with preliminary reports of positive outcomes.<sup>10</sup>

Although there is no evidence that particular models of transitional care are more effective than others,<sup>3</sup> evidence exists to support certain components, including planning and coordination,<sup>6 10</sup> opportunities for young people to meet the adult healthcare team who will look after them before the transfer,<sup>11</sup> and to be seen independently from their parents or caregivers.<sup>12</sup> As well as dealing with medical issues, transitional care also needs to include skills training, including self advocacy and the ability to negotiate services independently; education about general adolescent health issues such as substance abuse, mental health,

**Key elements of transitional care**

An early start—When children enter a paediatric service, they should know when they can expect to leave it.

A key worker for each individual

A written transition policy between paediatric and adult services

A flexible policy on timing of events

Skills training in communication, decision making, creative problem solving, assertiveness, self care, self determination, and self advocacy

An education programme for patient and parent which addresses medical, psychosocial, and educational/vocational aspects of care.

A written individualised healthcare transition plan in place by age 14, created with the young person and family, with regular review and update

Administrative support, including provision of a medical summary that is portable and accessible

A training programme in adolescent health and transitional care for paediatric and adult team members

Primary and preventive care involvement and provision

Affordable continuous health insurance coverage (of appropriate) throughout adolescence and adulthood

exercise, and sexual health; educational and vocational issues, particularly career exploration, work experience and disclosure; and parenting issues, particularly learning advocacy for their own children. Young people should not move to adult services until they have the necessary skill set required for them to function effectively in adult services.<sup>13</sup> Thus, the provision of developmentally appropriate training and informational resources and assessment of their assimilation by the young person is key. These and other key elements of good practice (the evidence for which is summarised by McDonagh et al<sup>10</sup>) in moving people from children's to adult services are summarised in the box.

The key challenges for health services in transition relate primarily to bridging the differing cultures of paediatric, adolescent, and adult health care.<sup>11</sup> The concept of adolescent health, which sees young people as resources for their own health, contrasts with the often reactive medical model of adult health care. Paediatrics and adolescent medicine are more focused on the future, emphasising the reciprocal influences of growth and development on health and disease. Other differences include more help with non-adherence, a higher tolerance of immaturity, and a lower threshold for active input into procedural pain management in paediatric and adolescent medicine. Faced with adolescents, adult providers often react in one of two ways: "adolescents are bewildering creatures—we need help" or "adolescents just need to grow up." Mutual professional respect is integral to successful transition, with acknowledgement of the importance of developmentally appropriate clinical expertise, irrespective of the setting.

The task of developing services which effectively cross these cultures and involve the young person and family as well as professionals from education, social

services, and voluntary agencies, all with their differing perspectives and anxieties, should not be underestimated. Teaching about adolescent health will need to start at undergraduate level. Fortunately transitional care itself provides a useful model for teaching team and interagency working, age and developmentally appropriate care, and the importance of sociocultural influences on health.

In Britain the lack of well developed further training in adolescent health care<sup>6</sup> presents an additional challenge, in contrast to North America and Australia. A recent staff survey in a leading children's hospital, where at least a third of current patients are in the adolescent age group, found that 60% of respondents reported having no formal training in adolescent health.<sup>12</sup> The need for training is currently being addressed by the Department of Health and the royal colleges.

The host of issues facing adolescents with chronic conditions that are not specific to their particular illness<sup>13</sup> supports generic, inter-specialty developments in transitional care. While additional resources will be necessary, changes in attitude and behaviour are also important and cost nothing. In view of the increasing numbers of survivors of childhood chronic illness, there is now an urgent need for developments in service, training, and research in transitional care, so that all young people can meet their full adult potential.

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